

Note

Significant range extensions for 10 species of vascular plants in northern New South Wales

During an intensive survey of the granitic outcrop flora of the New England Batholith, New South Wales (Hunter, unpublished) between March 1994 and September 1995, many new distributional records were noted. Some of these records have been dealt with previously, for example additional records of *Astrotricha roddii* Makinson (Nadolny, Benson & Hunter 1996) for New South Wales and new occurrences of *Leucopogon cicatricatus* J. Powell and *Muehlenbeckia costata* K.L. Wilson & Makinson ms (see Wilson 1990; Hunter 1995, 1996) in Queensland. Notification of other records comprising either large disjunctions over botanical and state divisions, or those considered important due to the taxa being restricted is warranted. Notes on the locality and habitat of such species are given along with estimates of population sizes. Voucher specimens for all of the species and localities discussed here are housed at the New England Herbarium (NE).

In addition to the extensive field survey by one of us (Hunter), the information presented here has been substantiated by checking the relevant holdings at the National Herbarium of NSW (NSW) and NE. Where relevant, the extensive records of collections of Euphorbiaceae in Queensland (Forster & Henderson 1994) have been checked.

1. *Pseudanthus divaricatissimus* Benth. (Euphorbiaceae)

Distribution and notes: This taxon till now has been recorded in the rocky sandstone areas of the higher parts of the Blue Mountains near Sydney, and locations encompassing the South Coast, Central Tablelands and the Central Western Slopes of New South Wales (James & Harden 1990, Carolin & Tindale 1994).

In our study, a small population of this species was discovered on private property north east of Guyra on the Northern Tablelands of New South Wales. Individuals were found growing in heath and mallee between rocks and boulders on leucadamellite rock outcrops. Populations were found on two separate outcrops on the same property. Less than 50 individuals were thought to be on these outcrops. Associated species include *Eucalyptus codonocarpa* Blakely & McKie, *Brachyloma saxicola* J.T. Hunter, *Acacia venulosa* Benth., *Kunzea obovata* Byrnes, *Allocasuarina rigida* (Miq.) L. Johnson subsp. *rigida*, *Leucopogon neo-anglicus* F. Muell. ex Benth. and *Mirbelia confertiflora* Pedley. Most granite outcrops within the region were searched over 10 days, but no further populations of this species were found.

New South Wales. NORTHERN TABLELANDS: Watteridge, northeast of Guyra, 30°02' S 151°53' E, Nov. 1994, Hunter s.n. (NE).

2. *Pseudanthus ovalifolius* F. Muell. (Euphorbiaceae)

Distribution and notes: This species till now has been recorded mainly in Tasmania and Victoria.

Early reports included New South Wales and Queensland (Moore & Betche 1893, Curtis 1967, Willis 1972). However, the records for Queensland and New South Wales were unsubstantiated (Stanley 1983, James & Harden 1990), the putative New South Wales record being from the south coast (James, T. 1995, pers. comm.).

In our study a population of this species was discovered on the North Western Slopes of New South Wales. Plants were growing in heath amongst granite boulders on a small outcrop of about half a hectare in area. The plants were restricted to crevices between boulders. The population size was estimated at less than 30

individuals. Associated species include *Prostanthera staurophylla* F.Muell., *Leucopogon neo-anglicus* F.Muell. ex Benth., *Kunzea bracteolata* Maiden & E.Betche, *Melichrus erubescens* Cunn. ex DC. and *Acacia granitica* Maiden. Despite rigorous searching of nearby outcrops and others within the reserve over 6 days, no other populations of this species were found.

New South Wales: NORTH WESTERN SLOPES: Torrington Regional Reserve, 29°13' S 151°41' E, Sep 1995, *Hunter* s.n. (BRI, NE, NSW).

3. *Micrantheum ericoides* Desf. (Euphorbiaceae)

Distribution and notes: Till now *Micrantheum ericoides* was known from rocky areas in the coastal districts of New South Wales and Queensland (James & Harden 1990, Forster & Henderson 1994).

In our study, this species was found on the North Western Slopes of New South Wales in heath on rocky outcrops. While the plants were not common, they were found in many scattered localities.

Associated species include *Acacia granitica* Maiden, *A. torringtonensis* Tind., *Boronia granitica* F.Muell., *Prostanthera staurophylla* F.Muell., *Kunzea bracteolata* Maiden & E.Betche and *Leucopogon neo-anglicus* F.Muell. ex Benth.

New South Wales: NORTH WESTERN SLOPES: Torrington Regional Reserve, 29°13' S 151°41' E, Sep 1995, *Hunter* s.n. (BRI, NE, NSW).

4. *Monotaxus macrophylla* Benth. (Euphorbiaceae)

Distribution and notes: *Monotaxus macrophylla* is an Endangered Species under Schedule 1 of the Threatened Species Conservation Act (New South Wales Government 1995). Till now it has been recorded as a species of rocky areas of the North Western Slopes and Plains of New South Wales, at a locality in the South Coast of New South Wales, and more commonly in south east and central Queensland (James & Harden 1990, Forster & Henderson 1994).

In our study, very large numbers of this species were found on the Northern Tablelands of New South Wales. Many hundreds of plants were observed growing with *Muehlenbeckia costata* on recently burnt leucadamellite rock outcrops throughout State Forest and Flora Reserves. No germination of *Monotaxus macrophylla* seed was noted on adjacent unburnt areas of the same outcrops. This suggests that *Monotaxus macrophylla*, like the associated *Muehlenbeckia costata* (Hunter, unpublished), is a fire follower.

New South Wales: NORTHERN TABLELANDS: Waita State Forest, Crown Mt Flora Reserve, 30°00' S 151°54' E, Feb 1995, *Hunter* s.n. (BRI, NE, NSW).

5. *Gompholobium* sp. B (Fabaceae) (James & Harden 1990)

Distribution and notes: *Gompholobium* sp. B is an undescribed taxon till now recorded as occurring in rocky areas south of the Blue Mountains in New South Wales and also in Victoria (Wiecek 1991).

In our study, a small number of plants of this taxon was found on the North Coast of New South Wales (Sheringham & Westaway 1995 p.112: 'Mann River Nature Reserve', which should read 'Gibraltar Range National Park'). These plants were growing in dry sclerophyll forest on granitic soil. Subsequently, plants were found in wet heath near the same locality (Williams, P. 1995, pers. comm.). Despite further survey work in the Gibraltar Range National Park over 6 days, no further populations of it were found.

New South Wales: NORTH COAST: Tin Ore Creek, Gibraltar Range National Park, 29°31' S 152°18' E, Aug 1994, *Hunter* s.n. (NE)

6. *Rapanea howittiana* Mez (Myrsinaceae)

Distribution and notes: *Rapanea howittiana* till now is recorded as common in coastal and nearby hinterland areas of south eastern New South Wales and Victoria. While the species was known to extend to the North Coast of New South Wales and south-eastern Queensland south of Noosa Heads, it was thought to be uncommon there (Harden 1990).

In our study, this species was found on the Northern Tablelands of New South Wales. A stand of 10 plants was found growing amongst large boulders on a leucoadamellite outcrop. Associated plants include *Quintinia sieberi* A. DC. and *Notelaea* sp. A (see Harden 1992).

New South Wales: NORTHERN TABLELANDS: flank of Crown Mountain, Crown Mountain Flora Reserve, Warra State Forest, north east of Guyra, 29°59' S 151°55' E, Mar 1994, *Hunter* 1823 (NE).

7. *Eucalyptus exserta* F. Muell. (Myrtaceae)

Distribution and notes: This species is common in Queensland but has been recorded only in the far north of the North Western Slopes and Plains of New South Wales above Ashford (Hill 1991).

In our study, a small stand of this species was found in the central portion of the North Western Slopes of New South Wales. This presents a significant southern extension of range (Hill, K 1996 pers. comm.). No other stands of this species were seen during subsequent survey work over 8 days in the vicinity.

New South Wales: NORTH WESTERN SLOPES: 'Clayton Chase', north west of Glen Innes, 29°27' S 151°20' E, 14 Jun 1995, *Hunter* s.n. (NE)

8. *Homoranthus prolixus* Craven & S.R. Jones (Myrtaceae)

Distribution and notes: Till now, *Homoranthus prolixus* has been recorded as restricted to the Howell district of the North Western Slopes of New South Wales (Harden 1993).

During our study, this species was found on two adamellite rock outcrops on the Northern Tablelands of New South Wales. Each of these outcrops was on adjacent private properties. While both properties are grazed, the populations of this species there were untouched and considered healthy. Approximately 300 plants were estimated to be on these outcrops. Despite four further days surveying the range, no further populations were detected. However, many other outcrops were not surveyed and further localities of occurrence of this species may be found. Associated species include *Acacia nerifolia*

Cunn. ex Benth., *A. granitica* Maiden, *Olearia elliptica* DC., *Cryptandra amara* Smith and *Callitris endlicheri* (Parl.) Bailey.

New South Wales: NORTHERN TABLELANDS: 'Longford Station', north east of Bendemeer, 30°45' S 151°08' E, Jul 1995, *Hunter* s.n. (NE, NSW).

9. *Boronia granitica* Maiden & E. Betcher (Rutaceae)

Distribution and notes: Till now, *Boronia granitica* has been recorded as a species with a ROTAP code (Briggs & Leigh 1988) of 3VC, which occurs commonly among granite boulders along the North Western Slopes north from Howell in New South Wales, and in the Stanthorpe area of Queensland (Quinn et al. 1995).

In our study, three specimens of *B. granitica* were found on a leucoadamellite outcrop in the Northern Tablelands of New South Wales. These plants were growing in heath amongst boulders.

Two of the plants had been eaten by goats, while the third was protected from grazing by the rocks and was uneaten. Two further days were spent surveying the area, but no more plants of this species were found.

New South Wales: NORTHERN TABLELANDS: 'Brookvale', Parlour Mountains, north west of Armidale, 30°17' S 151°26' E, Mar 1995, *Hunter* s.n. (NE)

10. *Zieria* sp. P (Rutaceae) (Armstrong 1991)

Distribution and notes: Till now *Zieria* sp. P has been known from rocky outcrops in the Warrumbungle and Nandewar Ranges and at Howell on the western edge of the Northern Tablelands and in the North Western Slopes of New South Wales (Armstrong 1991).

In our study, this species was found on private property on the Northern Tablelands of New South Wales and on the North Western Slopes of New South Wales. At all these localities, low numbers of the plants were seen scattered on porphyritic rock outcrops.

New South Wales: NORTHERN TABLELANDS: 'Brookvale', Parlour Mountains, north west of Armidale, Mar 1995 *Hunter* s.n. (NE); NORTH WESTERN SLOPES: 'The Willows', north west of Glen Innes, 29°27' S 151°27' E, Apr 1995 *Hunter* s.n. (NE); 'Rocky Glen', north west of Glen Innes, 29°31' S 151°26' E, 4 Apr 1995 *Hunter* s.n. (NE).

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